July / August 2021 SPED Update

1 message

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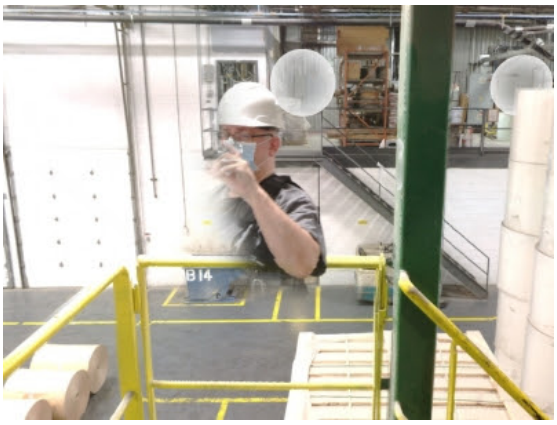
Sun, Jul 25, 2021 at 12:14 PM

Society of Piping Engineers and Designers

July / August 2021 SPED Update



Over half of your editor has been lost in a tragic point cloud Real View image incident. Heroic as he is, he will strive to complete the SPED Update nevertheless having only one arm, a shoulder and a head remaining.

Membership News

New Members and Renewals

Mostafa Mohamed Ahmed
Moustafa Zeraoula
Delby Vasquez

Jason Simmons
Mohammad Saeed
Chris Bowman
Birbahadar Singh Khangura
Matthew Rapp
Victor Agwulonu
Renjith Reghunath

PPD Certification Achieved

Mohamed Ewis Ahmed Khaled PPD2
Arti Patel PPD3
Ahmed Mohamed Abd El Rahman PPD1

PPD Certification Enrolments

Moustafa Zeraoula

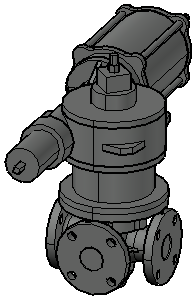
Piper Boot Camp and Process Plant Layout Enrolments

Gary Sanders
Matthew Rapp

High Purity Course Enrollments

Bir Khangura

DeZurik Does it Right



Congratulations to DeZurik for easy-to-find and download 3D models of valves - no registration required. And they have a bewildering number of CAD file types. Well done, deZurik!

https://www.dezurik.com/products/product-line/plug-valves/3way-plug-valves-ptw/1/4/

A New Methodology in Generating Digital Plants in AVEVA PDMS from Navisworks Model

I am confused after reading through the PDF. The paper mentions that people at the refinery are using paper documents because the refinery is so old.

But it also states that the refinery has been "reverse-engineered" from Navisworks files to PDMS files (at least I *think* that's what it says). But where did the digital Navisworks files come from in the first place since the facility is too old to have been originally designed with digital tools? Was the refinery laser scanned and then modelled by hand and then added into Navisworks and then translated to PDMS?

http://growingscience.com/beta/jpm/3279-a-new-methodology-in-generating-digital-plants-in-aveva-pdms-from-navisworks-model.html

http://www.growingscience.com/jpm/Vol4/jpm_2019_18.pdf

List of 3D Piping / Plant Layout Software Packages

PDMS, E3D. etc.
SmartPlant, S3D, etc.
AutoPLANT
Plant 3D
Cadison
PDS
QuickPen
SMAP3D
CADWorx
Procad
OpenPlant
[...]

Feel free to add others...

Cryogenic Process of Air Separation

"The separation of air into its constituent gases is done through the implementation of a specific air separation technology. There different air separation technologies which are available at present, each one aimed at exploiting different attributes with regard to the difference in physical properties between the constituent gases of the air. In other words, an air separation technology is based on the fact that each of the constituent gases of air has different physical properties and hence, air separation is realized through exploiting a physical property such as (i) distinguishing between molecule sizes of the constituent gases, (ii) distinguishing between difference in diffusion rates through certain materials, (iii) adsorption preference which special materials have towards certain gases, and (iv) difference in boiling temperatures etc.

Some of the technologies being used today include cryogenic, adsorption, chemical processes, polymeric membranes, and ion transport membrane (ITM). Out of these technologies, cryogenic air separation technology is in a mature stage of its life cycle, thus making it the only feasible means from the presently available technologies for the mass production of air products such as oxygen, nitrogen, and argon.

Air separation technologies are used for the production of oxygen and / or nitrogen as gases and sometimes as liquid products. Some plants also produce argon either as a gas,

or a liquid, or both. All air separation processes start with compression of air. All air separation plants employ either non cryogenic based technologies or cryogenic based technologies. Air separation plants employing non cryogenic air separation technologies produce gaseous oxygen or nitrogen products using near ambient temperature separation processes. These plant produce oxygen which is typically 90 % to 95.5 % pure or nitrogen which is typically 95.5 % to 99.5 % oxygen free. Air separation plants can produce more than three times more nitrogen than oxygen, but a nitrogen-to-oxygen product ratio of 1:1 to 1.5:1 is normally maintained."

https://www.ispatguru.com/cryogenic-process-of-air-separation/

Free to SPED Members - High Purity Piping Module

The SPED Board has released its new module on High Purity Piping. The module is free to SPED members. High-Purity piping is important in many industries, including:

- Food, Dairy, and Beverage
- Pharmaceutical
- Bioprocessing
- Semi-Conductor

This module is a quick overview of the standards and practices utilized in High-Purity piping and equipment.

The module is free to all SPED members. Registration can be done yourself, with the enrollment key given to you by this office.

For more information contact
catherine_van_der_walt@spedweb.com

The Cost of CAD

"The more I read about big-name CAD producers, the more it seems they chase bigger spenders, rather than focus on customer needs, especially small and mid-sized customers, who can't justify selling their homes, kids, and pets to buy super high-end hardware and insanely expensive products."

https://upfrontezine.substack.com/p/upfrontezine-10xx-2-cad-guys-talk

SMEs Wanted for PPD Advisory Committee and New SPED Courses

The goal here is to collect knowledge of specialty design practices and unique process equipment found in non-refining / power plant disciplines which utilize piping.

- cryogenics piping
- polymer piping
- solids (powders) piping

- food grade piping
- brewery piping
- steam piping
- pharmaceutical piping
- electronics fab piping
- pulp & paper

Free E3D Training

https://www.aveva.com/en/training/cloud-training-center/

"*Take advantage of 20-hours free access to training modules to learn the core aspects of AVEVA ™ E3D Design with all supporting material*"

SPED Training and Certification News

The spedexams.com PPD Exams website has been merged into the SPED.education PPD Courses website. This change will save on server space and consolidate training-related content.

Anton's PipingDesigners.com Jobs Board Has Been Rebooted

Special COVID-19 Home Study Pricing Continues for July and August 2021

SPED recognizes that many of our members are under stay-at-home orders. We must work and study away from workplaces and schools.

Continuing for the months of May and June, SPED is offering a bundle price for its two online courses, ***Piper Bootcamp*** and ***Process Plant Layout***. For the price of the course (membership required), both the course and PPD Certification Testing and application is included. This is a US$250 savings.

We hope this helps utilize the time productively. Please stay safe!

For more information contact
catherine_van_der_walt@spedweb.com

REMINDER TO SPED MEMBERS TO UPDATE THEIR PROFILES AND PROVIDE A NON-WORK CONTACT EMAIL ADDRESS

Many SPED members use their work email address when they join SPED, but this means that we will lose your contact details if you change jobs. Login at spedweb.com and keep your email address up-to-date.

Theodolite HD 4+ AR Navigation Viewfinder

"Theodolite HD is a multi-function viewfinder that combines a compass, two-axis inclinometer, rangefinder, GPS, map, nav calculator, and geo-overlay photo/movie camera"

This is useful for field use since each photo is superimposed with graphics providing information on the photo taken.

https://apps.apple.com/us/app/theodolite-hd/id425456242

Real Ethical Problems: Bribery And Corruption, Pressure for Partiality and Sloppiness With Safety

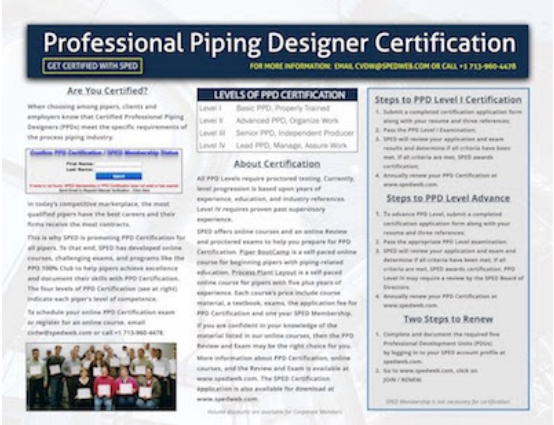
(LinkedIn)

https://www.linkedin.com/pulse/real-ethical-problems-1-bribery-corruption-sean-moran/

https://www.linkedin.com/pulse/real-ethical-problems-2-pressure-partiality-sean-moran/

https://www.linkedin.com/pulse/real-ethical-problems-3-sloppiness-safety-sean-moran/

Graphic from SPED Egypt Webinar of 19 June 2021
(Click to embiggen)



Flexicraft is your one call for every style of expansion joint and flexible connector.

FLEXICRAFT

(Click link for video)

Don't forget that SPED is always on the lookout for member-written piping-related articles to publish at the website

See you all next time!

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